

understood, the position is taken that composition claims require an inert carrier. The position also is taken that claim 1 reflects an improper joinder of independent inventions.

Applicants respectfully submit that a pharmaceutical composition necessarily contains an inert carrier. However, the rejection is believed to be obviated in view of the amendments submitted herein. In particular, claim 1 has been rewritten as new claim 20 which recites the additional feature of comprising an inert carrier. Additionally, as noted above, the new claims presented herein are directed to the elected subject matter only.

Further, the Office Action objects to use of the term "an apoptosis-inducing amount" stating that it is "a screen that does not recite a real disease". While Applicants believe that use of "an apoptosis-inducing amount" is proper and definite claim terminology, it also is submitted that the rejection is obviated by the within amendments. In particular, the new claims have been redrafted to recite language such as -- A pharmaceutical composition for inducing apoptosis comprising a therapeutically effective amount of a compound....--.

Reconsideration and withdrawal of the afore-mentioned rejections are thus requested.

Claims 1, 2 and 3 stand rejected under 35 USC §112, 1st and 2nd paragraph, on the basis of several alleged informalities.

While Applicants believe that such claims are abundantly clear when read in view of the specification, as is proper, it also is submitted that the within amendments obviate the rejection. In particular, the subject matter of original claims 1-3 have been rewritten in new claims 20-22, which claims have removed or clarified the allegedly objectionable

terms.

Reconsideration and withdrawal of the rejection are thus requested.

Claims 5, 6, 7, and 13 also stand rejected under 35 USC, 112, 5th paragraph, on the basis of improper multiple dependencies. It is submitted that the within amendments obviate the rejection. In particular, the noted claims have been cancelled and multiple dependencies do not appear in the newly presented, rewritten claims.

Reconsideration and withdrawal of the rejection are thus requested.

Claims 8, 9, and 15-19 stand rejected under 35 USC 112, 2nd paragraph, in that the IUPAC names of the relevant compounds are not provided. Again, it is submitted that the within amendments obviate the rejection. In particular, the noted claims have been cancelled and the IUPAC names of such compounds are provided in the rewritten claims.

The Office Action also objects to claim 14, on the grounds that such claim is allegedly not in a proper composition claim format. Again, it is submitted that the within amendments obviate the rejection. In particular, it is noted that claim 14 has been cancelled.

Reconsideration and withdrawal of the rejection are thus requested.

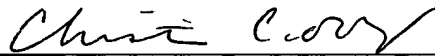
Additionally, claims 10-19 stand rejected under 35 USC §101 and 35 USC §112, on the grounds that they are drafted as "use" claims and are thus improper. Again, it is submitted that the within amendments obviate the rejection. In particular, it is noted that claims 10-19 have been cancelled.

Reconsideration and withdrawal of the rejection are thus requested.

The Office Action further indicates that several of the drawings are objected to on the basis of various informalities. Applicants submit herewith replacement sheets for Figures 1, 3, 4, 8, 9, 17, 21, 22, 24, 28, 31, 32, 33, 34, 35, 36 and 37. Such figures have been amended merely to correct improper margins and to provide better legends, in accordance with the comments by the Draftsperson on the PTOL 948 form. Additionally, following issuance of a Notice of Allowance, Applicants shall submit a set of formal drawings for the subject application.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,



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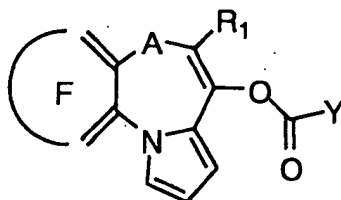
VERSION MARKED TO SHOW CHANGES

IN THE CLAIMS:

Original claims 1-19 have been cancelled.

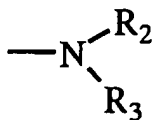
New claims 20-32 have been added.

20. (new) A pharmaceutical composition for inducing apoptosis comprising a therapeutically effective amount of a compound having the general formula (I):



wherein:

- (i) R₁ represents an unsubstituted C₆ or C₁₀ aryl group; or a C₆ aryl group substituted with Me or OMe;
- (ii) A represents O, S; or a sulfur atom oxidized to sulfoxide;
- (iii) the cyclic group labeled F represents an unsubstituted C₆ or C₁₀ aryl or a C₅ heteroaryl group (nitrogen as heteroatom) or a phenyl substituted with ethoxycarbonyl function; and
- (iv) Y represents the group



wherein R₂ and R₃ are independently hydrogen; or methyl or ethyl;

or Y represents the group CH₃, or (CH₂)₂CH₃ or an unsubstituted C₅ heteroaryl group

(nitrogen as heteroatom); and
further comprising an inert carrier.

21. (new) A pharmaceutical composition according to claim 20, wherein R₁ is an unsubstituted 1-naphthyl.

22. (new) A pharmaceutical composition according to claim 20, wherein F is an unsubstituted phenyl group or an unsubstituted naphthyl or 2,3-pyridine.

23. (new) A pharmaceutical composition according to claim 20, wherein R₁ and F represent a 1-naphthyl group and a 2,3-naphtho-fused group, respectively.

24. (new) A pharmaceutical composition according to claim 20 wherein Y represents a CH₃ or N(Me)₂ or NHMe or a 4-pyridine group.

25. (new) A pharmaceutical composition according to claim 20, wherein the compounds are selected from those having the formulae:

4-Acetoxy-5-phenylnaphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,

7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,

4-[(Dimethylcarbamoyl)oxy]-5-phenylnaphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,

7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,

7-[(Methylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]-benzoxazepine,

7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,

7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,

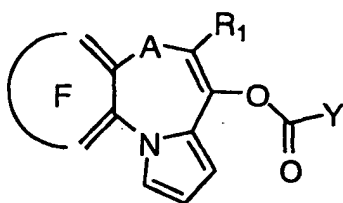
7-Acetoxy-6-(1-naphthyl)pyrrolo[1,2-d]pyrido[3,2-b][1,4]oxazepine,

4-Acetoxy-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,

4-[(Dimethylcarbamoyl)oxy]-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4] oxazepine, 7-

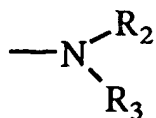
[(Ethylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-Isonicotinoyloxy-6-(p-methoxyphenyl)pyrrolo [2,1-d][1,5]benzothiazepine,
7-(Butyryloxy)-6-(p-methoxyphenyl)pyrrolo[2,1-d][1,5]benzothiazepine 5-oxide,
as defined herein.

26. (new) A method of inducing apoptosis in a subject comprising
administering a pharmaceutically effective amount of a compound of formula I



wherein:

- (i) R₁ represents an unsubstituted C₆ or C₁₀ aryl group; or a C₆ aryl group substituted with Me or OMe;
- (ii) A represents O, S; or a sulfur atom oxidized to sulfoxide;
- (iii) the cyclic group labeled F represents an unsubstituted C₆ or C₁₀ aryl or a C₅ heteroaryl group (nitrogen as heteroatom) or a phenyl substituted with ethoxycarbonyl function; and
- (iv) Y represents the group



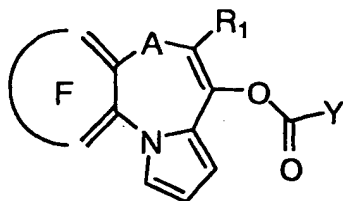
wherein R₂ and R₃ are independently hydrogen; or methyl or ethyl;
or Y represents the group CH₃; or (CH₂)₂CH₃ or an unsubstituted C₅ heteroaryl group
(nitrogen as heteroatom).

27. (new) A method for inducing apoptosis in a subject comprising administering a pharmaceutically effective amount of a compound selected from those having the formulae:-

4-Acetoxy-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
4-[(Dimethylcarbamoyl)oxy]-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]-benzoxazepine,
7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[1,2-d]pyrido[3,2-b][1,4]oxazepine,
4-Acetoxy-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
4-[(Dimethylcarbamoyl)oxy]-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4] oxazepine, 7-
[(Ethylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-Isonicotinoyloxy-6-(p-methoxyphenyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-(Butyryloxy)-6-(p-methoxyphenyl)pyrrolo[2,1-d][1,5]benzothiazepine 5-Oxide, as defined
herein.

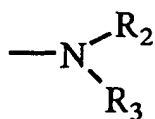
28. (new) The method of claims 26 or 27 wherein the subject is a human or animal.

29. (new) A method of treating cancerous tumors and other cancerous conditions in a subject comprising administering a pharmaceutically effective amount of a compound of formula I



wherein:

- (i) R_1 represents an unsubstituted C_6 or C_{10} aryl group; or a C_6 aryl group substituted with Me or OMe;
- (ii) A represents O, S; or a sulfur atom oxidized to sulfoxide;
- (iii) the cyclic group labeled F represents an unsubstituted C_6 or C_{10} aryl or a C_5 heteroaryl group (nitrogen as heteroatom) or a phenyl substituted with ethoxycarbonyl function; and
- (iv) Y represents the group



wherein R_2 and R_3 are independently hydrogen; or methyl or ethyl;

or Y represents the group CH_3 ; or $(CH_2)_2CH_3$ or an unsubstituted C_5 heteroaryl group (nitrogen as heteroatom).

30. (new) A method of treating cancerous tumors and other cancerous conditions in a subject comprising administering a pharmaceutically effective amount of a compound selected from those having the formulae:-

- 4-Acetoxy-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
- 7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
- 4-[(Dimethylcarbamoyl)oxy]-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
- 7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
- 7-[(Methylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]-benzoxazepine,
- 7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,

7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[1,2-d]pyrido[3,2-b][1,4]oxazepine,
4-Acetoxy-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
4-[(Dimethylcarbamoyl)oxy]-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4] oxazepine, 7-
[(Ethylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-Isonicotinoyloxy-6-(p-methoxyphenyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-(Butyryloxy)-6-(p-methoxyphenyl)pyrrolo[2,1-d][1,5]benzothiazepine 5-Oxide, as defined
herein.

31. (new) The method of claims 29 or 31 wherein the subject is a human or animal.

32. (new) A compound selected from the group consisting of:
4-Acetoxy-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
4[(Dimethylcarbamoyl)oxy]-5-phenylnaphto[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]-benzoxazepine,
7-[(Dimethylcarbamoyl)oxy]-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo[2,1-d][1,5]benzothiazepine,
7-Acetoxy-6-(1-naphthyl)pyrrolo [1,2-d]pyrido[3,2-b] [1,4]oxazepine,
4-Acetoxy-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4]oxazepine,
4-[(Dimethylcarbamoyl)oxy]-5-(1-naphthyl)naphtho[2,3-b]pyrrolo[1,2-d][1,4] oxazepine, 7-
[(Ethylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
7-[(Methylcarbamoyl)oxy]-6-phenylpyrrolo[2,1-d][1,5]benzoxazepine,
as defined herein.